

20000613.ba v02_n923.bam.20000613

>From ???@??? Tue Jun 13 10:56:46 2000 -0500
Message-Id: <200006131555.e5DFtHL29263@sco.theporch.com>
Date: Tue, 13 Jun 2000 10:54:54 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2923

BOATANCHORS Digest 2923

Topics covered in this issue include:

- 1) "Undercover Op. Station."
by Andre Guibert <aguibert@sympatico.ca>
- 2) Thunderbolt Questions
by Steve Berg <z931086@corn.cso.niu.edu>
- 3) FS: Hammarlund "Outercom" model FM50A
by Michael Crestohl <mc@sover.net>
- 4) RE: Why is this cap in my HRO-50?
by Allen Cutts <cacutts@mindspring.com>
- 5) [Fwd: Why is this cap in my HRO-50?]
by Scott Robinson <spr@earthlink.net>
- 6) Re: EARLY BC-224 DYNAMOTOR AVAILABLE
by "David L. Stinson" <arc5@ix.netcom.com>
- 7) RE: Why is this cap in my HRO-50?
by "Robert P. Okas" <vintage@best.com>
- 8) Re: Why is this cap in my HRO-50?
by Arden Allen <gumbear@pacbell.net>
- 9) Re: RECEIVER AUDIO
by Arden Allen <gumbear@pacbell.net>
- 10) R-808 Receiver Troubleshooting Information
by "David L. Stinson" <arc5@ix.netcom.com>
- 11) RE: Why is this cap in my HRO-50?
by "Bill Hawkins" <bill@iaxs.net>
- 12) Foothill Swap report
by "Jim Carrington" <jcall@sirius.com>
- 13) Stuck wafer switchs - Help needed
by "Jim Carrington" <jcall@sirius.com>
- 14) Re: Stuck wafer switchs - Help needed
by Arden Allen <gumbear@pacbell.net>
- 15) Re: Stuck wafer switchs - Help needed
by "James C. Garland" <4CX250B@miavx1.acs.muohio.edu>
- 16) Re: Stuck wafer switchs - Help needed
by "Bob Duckworth" <wb4mnf@atl.org>
- 17) Re: Stuck wafer switchs - Help needed
by MODSTEPH@ACS.EKU.EDU
- 18) RE: Stuck wafer switchs - Help needed

- by "Ed Sieb" <sieb@sympatico.ca>
- 19) RE: Why is this cap in my HRO-50?
by Bob Roehrig <broehrig@admin.aurora.edu>
- 20) Re Why is this capacitor in my HRO - Final results
by " James R. Binkley" <w4aos@his.com>
- 21) RE: Vibrator Help
by "McDonald, Marll" <Marll.McDonald@compaq.com>
- 22) Re: Vibrator Help
by "Mike B. Feher" <n4fs@monmouth.com>
- 23) WTB: Sencore FE-20 meter.....
by Arden Allen <gumbear@pacbell.net>

Message-Id: <1.5.4.16.19800104202137.109775c8@pop1.sympatico.ca>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Andre Guibert <aguibert@sympatico.ca>
Subject: "Undercover Op. Station."
Date: Mon, 12 Jun 2000 20:34:01 -0400

Bonsoir to All
Finally got hold of some pictures of the bugger. sorry
for the quality.
The first one is the P/S, second, the tx and the last
the receiver.
1- http://www.enter-net.com/~9sdchoui/SPY_PS.JPG
2- " " " " " " /SPY_RADIO.JPG
3- " " " " " " /SPY_RX.JPG

Andre
PS: A B2 suitcase and a S.O.C.R.A.T close surveillance
receiver owner.

Andre Guibert
aguibert@sympatico.ca

Message-ID: <39458CFC.742F48F0@corn.cso.niu.edu>
Date: Mon, 12 Jun 2000 20:23:08 -0500
From: Steve Berg <z931086@corn.cso.niu.edu>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Thunderbolt Questions
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Well, after sitting on the workbench for about 3 years while I battered my way through my graduate courses, I finally managed to finish re-capping my HF Johnson Thunderbolt amplifier. When I first fired it up several years ago, it vaporized both 220 volt line fuses, so I figured those original old filter capacitors were beyond pain and care. Now, before I muscle it into the case, are there some things I should look at? What sort of problems can I head off at the pass? While it will be some time before I can use it, since I do not have my HF vertical installed yet, can anyone give me some pointers on its care and feeding?

73,

Steve WA9JML EN51

Message-Id: <4.2.2.20000612213231.00b97810@mail.sover.net>
Date: Mon, 12 Jun 2000 21:38:38 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Michael Crestohl <mc@sover.net>
Subject: FS: Hammarlund "Outercom" model FM50A
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Another buried treasure.....

I picked this thing up years ago with the plans of putting it on the ham bands but.....it needs to be adopted by someone who will care for it better than I have or probably ever will so it's up for grabs.

It was made by HAMMARLUND in NC and is a VHF commercial radio. I don't know much more than that - not sure even if it covers the LOW or HIGH VHF band. It could use a good cleaning up but is probably a worthy item for the HAMMARLUND collector. It's the only one I've ever seen so they are probably pretty scarce. Looks like the same color scheme as the 1960s HQ series receivers but has a black front with a couple of aluminum panels with knobs, lights and switches. I have no idea if it works and no docs.

How about \$50.00 plus shipping? If interested please reply by e-mail.

73,

Michael Crestohl
mc@sover.net

Message-Id: <200006130141.VAA13927@granger.mail.mindspring.net>

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Mon, 12 Jun 2000 21:40:09 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Allen Cutts <cacutts@mindspring.com>
Subject: RE: Why is this cap in my HRO-50?

If I recall, during the war, Zenith had a little fix for their 1930s radios to keep them from blowing transformers when the rectifier would go. They would recommend placing a number 47 bulb in series on both leads from the secondary of the power transformer to the rectifier tube. Besides, most guys I talk to replace all their 5V4s with 5U4s due to the way the 5V4s fail and take out the transformer too.

Allen Cutts
N4OZI

Message-ID: <394595B3.9E5CE243@earthlink.net>
Date: Mon, 12 Jun 2000 19:00:19 -0700
From: Scott Robinson <spr@earthlink.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: [Fwd: Why is this cap in my HRO-50?]
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Scott Robinson wrote:

>
> Folks,
>
> I put a fuse in EVERY radio with a power transformer that I work on.
> Sometimes I hide it under the chassis, sometimes I drill a hole and
> mount it that way, but it always gets added when not originally
> present. Power transformers are expensive and exact ones very hard to
> find. Besides, I don't want to burn my house down while I'm in the
> bathroom. BTW I don't leave the house (except for going to the
> garage/shop downstairs) with a BA or other old radio powered up...and
> the same goes for my clothes dryer.
>
> AC-CD sets have fuses inherent in the design, so they don't need added
> ones.
>
> So there's my opinion!

>
> --
> Scott Robinson
> spr@earthlink.net
>
> Junque is GOOD for you!

--
Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Message-ID: <39459C24.F52B30EC@ix.netcom.com>
Date: Mon, 12 Jun 2000 21:27:48 -0500
From: "David L. Stinson" <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: EARLY BC-224 DYNAMOTOR AVAILABLE
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The Dynamotor is spoken for. Thanks!

"David L. Stinson" wrote:

>
> I have a dynamotor assembly for the *early* BC-224 12 volt
> aircraft receiver. This is the first production set,
> which doesn't look anything like the later 224 or BC-348.
> It will NOT work in a late BC-224. ...

Date: Mon, 12 Jun 2000 19:40:08 -0700 (PDT)
From: "Robert P. Okas" <vintage@best.com>
To: Old Tube Radios <boatanchors@theporch.com>
cc: boatanchors@theporch.com
Subject: RE: Why is this cap in my HRO-50?
Message-ID: <Pine.BSF.4.21.0006121933500.5894-100000@shell114.ba.best.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Allen,

It's curious you should mention the 5V4 and its attendant failure mode. I have a DX-100 and when I got it, it had an absolutely flat 5V4 in the LV power supply. Having nothing better on hand, I stuck a 5U4 in the socket and never looked back.

Just recently, I picked up a Heath-labeled 5V4 that had no emission and a curious plate-cathode short in one diode. Cold, there was no continuity, but it showed a solid short when warmed up in the tube tester. Is the failure mode to which you allude?

73,
Bob - W3CD

On Mon, 12 Jun 2000, Allen Cutts wrote:

>
>
> If I recall, during the war, Zenith had a little fix for their 1930s radios
> to keep them from blowing transformers when the rectifier would go. They
> would recommend placing a number 47 bulb in series on both leads from the
> secondary of the power transformer to the rectifier tube. Besides, most guys
> I talk to replace all their 5V4s with 5U4s due to the way the 5V4s fail and
> take out the transformer too.
>
> Allen Cutts
> N4OZI
>
>

Date: Mon, 12 Jun 2000 19:43:58 -0700
From: Arden Allen <gumbear@pacbell.net>
Subject: Re: Why is this cap in my HRO-50?
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0FW20027NNV18T@mta5.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

Hi John;

> >From Roberta's comments, it sounds like you want to replace it with a
> capacitor in series with a very small fuse, say 20 mA. It would be nice
to
> get a Y rated safety cap (designed to fail open), but they probably don't
> come in that many hundreds of volts AC.

The cap on the HV secondary makes little sense to me. If RF is coupling through the power transformer it makes more sense to stop it on the primary side. Don't replace that cap even though with today's more reliable caps there still is some risk to the transformer. There should be a proper filter at

the AC power inlet to bypass RF to the chassis. Is there a line filter on the original HRO's?

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Date: Mon, 12 Jun 2000 19:31:52 -0700
From: Arden Allen <gumbear@pacbell.net>
Subject: Re: RECEIVER AUDIO
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0FW20027HNUZ8T@mta5.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

Hi John;

> If this sounds "hi fi", yes, it's true! The AF amp should faithfully pass
> along what it started with & not add to it.

There's nothing wrong with making something better than it is. But for the purposes of the discussion of communications receivers it doesn't take much for the audio amp improvements issue to become overwrought. That's thanks to the audiophoole wing of the tubes forever cult. If you really want a receiver to receive better then consider the following:

- 1 -- RF amplifier noise figure (particularly for 14 MHz and above)
- 2 -- RF amplifier strong signal linearity (cross modulation resistance)
- 3 -- Mixer noise contribution, linearity and controlled gain characteristics
- 4 -- Oscillator noise and mixer injection level over frequency
- 5 -- IF amplifier controlled gain characteristics
- 6 -- IF amplifier bandwidth characteristics
- 7 -- AGC controlled gain characteristics
- 8 -- Detector distortion
- 9 -- Noise limiter distortion of signal audio
- 10 -- Other problems that corrupt received signal quality (catch-all)

Those are just some things that come to mind. Some of them are abominably difficult problems to deal with and take a lot of time and work. I haven't embarked very far on this journey because of lack of the main ingredient, time. I would like to pirate some good ideas out there if they exist. What are some notorious examples of receiver problems and what are their remedies?

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-ID: <3945A460.46284D4@ix.netcom.com>
Date: Mon, 12 Jun 2000 22:02:56 -0500
From: "David L. Stinson" <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: R-808 Receiver Troubleshooting Information
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Sorry it's taken so long to get back to this-
too much going on right now.

I've stabilized the mechanical "wibble-wobble" problem
in four R-808 receivers with the same procedure:

1. Take the radio out of the case.
2. Look for a white ceramic binding post on the side
with a white wire secured by a nut. I think
it was one of the antenna wires. Disconnect it.
3. Turn the radio over.
4. Take a look at the RF deck. This is
a big module. It comes out in one piece.
Look for anything that is obviously loose.
Make sure all those coil forms with the
adjustment shafts sticking up are still
mounted tightly. I've never seen one loose,
but a friend once did.
5. Look at the main tuning linkage from the front panel
tuning crank to the RF module. This is a slip joint that
comes apart so you can remove the RF deck.
Look it over and you can figure it out.
Align this so the slip joint will come apart
when you remove the module.
Don't move the gears once you remove the deck!
5. Unscrew all the screws holding the module and lift it out.
NOTE: There may be other wires to disconnect. The last
one I worked on was five years ago so I may have forgotten
a couple of things.
6. Clean all the "plug-in" contacts that connect the module.
A shot of "DeOxit" will do wonders.

7. Wiggle every tube in its socket and make sure it's properly seated. For some reason, they built this thing with plugs and sockets that tend to oxidize over time. This oxidation was the main culprit in three radios.
8. Open the sides of the module and check the tube sockets for cold solder joints. I found this in two radios, both of which had a couple of tube socket pins that were not soldered at all!
9. Reassemble everything and enjoy your stable radio.

In four cases, it's always been just that simple.
If you have a mechanically unstable R-808 that is not repaired by this, please let us know what you find.

GL OM ES 73 DE Dave Stinson AB5S

From: "Bill Hawkins" <bill@iaxs.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Why is this cap in my HRO-50?
Date: Mon, 12 Jun 2000 23:40:39 -0500
Message-ID: <001d01bfd4f1\$8679cf80\$290aa8c0@darius>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Looked in Henny's 5th Radio Engineering Handbook under power supply transients. The starting transient when the AC switch is closed can draw heavy primary current until the line voltage reverses and takes it out of saturation. This is not a high frequency transient, but it can double the secondary voltage. The National solution is not discussed. My guess is that the transformer design may have made it more likely to do that than some others. So they damped the transient with a large cap. It was less expensive to snub half the winding and let transformer action take care of the other half of the secondary, since 600 VDC was pushing the limit for paper caps in those days.

This not something that an MOV will fix because it is not caused by opening the connection to the line, but that is another consideration.

Do not put a fuse/resistor/bulb in series with the 0.1 if you replace it. You will not know if the fuse opened until you catch a turn-on transient that pops the rectifier. Fuse the primary (why didn't National do that?).

Personally, I'd try one of those soft-start thermistor widgets, in a separate box so the heat doesn't fry the HRO. Sorry, I don't have the reference handy to select the thermistor. The MOV is still a good idea for the turn-off transient.

Regards,
Bill Hawkins

Message-ID: <007e01bfd4fd\$4c996940\$43f286cd@jcall.sirius.com>
From: "Jim Carrington" <jcall@sirius.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Foothill Swap report
Date: Mon, 12 Jun 2000 23:04:52 -0700
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Guys,

Last Saturday, I had the pleasure of attending the Foothill swap here in silicon gulch. Got there about 5:30 am and attendance was lighter than usual but as the day wore on more and more sellers came in. Boatanchors seen were first a Lafayette HA-700 clean and working price unknown, it sold. Also there was a National NCX-500 in fair cosmetic condition which was sold by a test equipment dealer for only \$60 (not to me), an SP-600 with front panel repainted a nice non-original glossy light green and non-original knobs sat unsold at \$100 (is the market saturated or are people just afraid of hernias. The same seller had an R4b with speaker in working condition at \$150. I was tempted till a friend pointed out some mods in the back. I've got one so I guess I didn't need another anyway. A friend had a very clean NC-140 which quickly went for its asking price of \$225. The best buys of the day were, astoundingly, a Collins 32V2 with cabinet and HQ-180 both in fine condition for under \$100 the pair. It pays to be in the right place at the right time. Wish I was there. I did have some luck, late in the morning as I was trolling the normally bleak BA wise, east area of the parking lot, I saw a low blue box sitting on a seller's table with various non-descript junk. I closed in and was amazed to see that it was the National LF-10 low frequency preselector for the HRO-500. It had seen a bit of a rough life with a dent in the top of the cabinet and some water marks on its aluminum face but knobs were all original and the face was unscratched. I guess my poker face still works, for \$25 it was mine. It made my day. I also found a clean SX-28 tuning knob sitting on a table. Now if I can find one more, my abused SX-28 will look much better.

Also seen at the swap, a nice clean AR-648 (?), the airborne R-390A for about \$200. It sat unwanted for most if not all of the morning, and a BC-342 or 348 and 2 or 3 Drake linears.

Met some of the local BA folks and enjoyed chatting. All in all a great day.

73

Jim Carrington

Message-ID: <008201bfd500\$b4d77a80\$43f286cd@jcall.sirius.com>
From: "Jim Carrington" <jcall@sirius.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Stuck wafer switchs - Help needed
Date: Mon, 12 Jun 2000 23:29:18 -0700
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi again guys,

As I reported, I was lucky to find a National LF-10 low frequency preselector at the Foothill . From outward appearances, it had seen some rain or other water at some time in its life, however. The 2 front panel wafer switches for antenna tuning and band change were frozen . After I took off the cover, I found the inside very clean so water had not gotten inside. I removed the knobs of the frozen switches and saw slight white residue , which I take to be some kind of corrosion, where the shafts go into their threaded bushings. I tried WD-40 and repeated turning of the shafts with a small crescent wrench on the shaft and pliers holding the steel of the switch body, to try to free them up . This technique worked to a degree but the shafts still are way way to hard to turn and repeated applications of WD-40 and turning the shaft back and forth is not making any more progress in freeing the shaft. My guess is that the corrosion is binding inside the bushing. Has anyone fixed this problem before ? Any suggestions appreciated.

Thanks

Jim Carrington

Date: Tue, 13 Jun 2000 00:19:35 -0700
From: Arden Allen <gumbear@pacbell.net>
Subject: Re: Stuck wafer switchs - Help needed
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0FW300IFI0BR0U@mta5.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

Hi Jim;

>My guess is that the corrosion is binding inside the
> bushing. Has anyone fixed this problem before ? Any suggestions
appreciated.

So far you've done the right thing but it may be too early to know if you
will be ultimately successfull. It took me two days to free one switch up
with the same kind of problem. It takes time for the WD-40 to cut through
the hardened goop. If it were only corrosion you could eventually grind it
up and wash it out with repeated applications of lubricant. Whichever it
is (probably both) just keep working the switch and adding plenty of WD-40.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-Id: <3.0.1.32.20000613065300.006c7b18@miavx1.muohio.edu>
Date: Tue, 13 Jun 2000 06:53:00 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: "James C. Garland" <4CX250B@miavx1.acs.muohio.edu>
Subject: Re: Stuck wafer switchs - Help needed
Cc: boatanchors@theporch.com
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 11:29 PM 6/12/00 -0700, you wrote:

>Hi again guys,

>

>As I reported, I was lucky to find a National LF-10 low frequency
>preselector at the FoothillThis technique worked to a degree but
>the shafts still are way way to hard to turn and repeated applications of
>WD-40 and turning the shaft back and forth is not making any more progress
>in freeing the shaft. My guess is that the corrosion is binding inside the
>bushing. Has anyone fixed this problem before ? Any suggestions appreciated.

>

Hi Jim,

This is a common problem, which I've often encountered. I've always freed
up stuck shafts by tilting the radio so the shafts point upwards and
dripping a few drops of penetrating oil on the shafts. Wait a few hours
until the oil soaks down into the bushings, and the shafts will turn
easily. You can get penetrating oil at a Sears Hardware store, but if you
can't find any then a lightweight sewing machine oil or 3-in-1 oil will
probably suffice.

73,

Jim Garland W8ZR

Message-Id: <200006131209.IAA23331@hat-trick.atl.org>
From: "Bob Duckworth" <wb4mnf@atl.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Stuck wafer switchs - Help needed
Date: Tue, 13 Jun 2000 08:10:30 +0100

I usually disassemble the switch or pot, hit the shaft and bushing with some emery paper and follow up with a dab of white lithium grease prior to reassembly. Better than new! Toughest part is getting the bushing off. Emery paper on shaft and penetrating oil usually does the trick though. Make sure any spalling from the set screw is filed off prior to pulling the shaft through thte bushing.

-bob
wb4mnf
Atlanta

Date: Tue, 13 Jun 2000 08:25:40 -0400 (EDT)
From: MODSTEPH@ACS.EKU.EDU
Subject: Re: Stuck wafer switchs - Help needed
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <01JQJQ94EW5E008582@ACS.EKU.EDU>
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=US-ASCII

Consideration: since the thing was under water for a while the white stuff you report might be calcification. Careful cleaning with vinegar dissolves that right out - and (being careful not to slosh it around inside) should clean out the bushing followed by rinse and another shot of WD-40. Good luck with it - and what do you plan to use it with?

73, A1 N5AIT

From: "Ed Sieb" <sieb@sympatico.ca>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Stuck wafer switchs - Help needed
Date: Tue, 13 Jun 2000 08:49:43 -0400
Message-ID: <LOBBJH0L00HLIPLONIAFIEEPCPAA.sieb@sympatico.ca>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

"Liquid Wrench", "Break-Free" or any good quality penetrating loosening oil. Always works for me.

Ed
VA3ES

> -----Original Message-----

> From: Jim Carrington

> Sent: Tuesday, June 13, 2000 2:29 AM

> Subject: Stuck wafer switchs - Help needed

>

> My guess is that the corrosion is binding inside the bushing.

> Has anyone fixed this problem before ? Any suggestions

> appreciated.

>

Date: Tue, 13 Jun 2000 07:57:40 -0500 (CDT)

From: Bob Roehrig <broehrig@admin.aurora.edu>

To: Old Tube Radios <boatanchors@theporch.com>

cc: Old Tube Radios <boatanchors@theporch.com>

Subject: RE: Why is this cap in my HRO-50?

Message-ID: <Pine.OSF.3.96.1000613075703.12771A-1000000@admin.aurora.edu>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

On Mon, 12 Jun 2000, Robert P. Okas wrote:

> Just recently, I picked up a Heath-labeled 5V4 that had no emission

> and a curious plate-cathode short in one diode. Cold, there was no

> continuity, but it showed a solid short when warmed up in the tube

> tester. Is the failure mode to which you allude?

The smaller 6X4 and 6X5 were prone to plate/cathode shorts too.

"Nostalgia is a thing of the past"

E-mail: broehrig@admin.aurora.edu or k9eui@arrl.net 73 de Bob, K9EUI

CIS: Data / Telecom Aurora University, Aurora, IL

630-844-4898 Fax 630-844-4222

PLEASE PUT ALL REPLIES IN ASCII TEXT ONLY

Message-ID: <394639E4.C72801E3@his.com>

Date: Tue, 13 Jun 2000 09:40:52 -0400

From: " James R. Binkley" <w4aos@his.com>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re Why is this capacitor in my HRO - Final results

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

I'm writing this to thank all who responded to my query re my HRO's transformer killing capacitor. Probably all the replies I'm going to get are in now. I will be away from home the rest of the week, so I'll summarize the replies.

3 were like me and didn't know why it was in there

2 reported having the same problem, so if you have a HRO take heed, but make your own decision.

1 recommended replacing it with a better quality cap

1 recommended putting a fuse in series so when it blew it couldn't kill the transformer

1 believed it was to prevent tunable hum

1 found a reference which seems to explain it as a turn-on transient preventer.

All in all I'm going to leave it out. I have never seen another power supply with a similar capacitor. If it was necessary because of a peculiarity of the National transformer, then I'm ok, since I have used a different one. If it was to prevent tunable hum, I'll deal with that when it manifests itself.

Again thanks to all

Bob w4aos

Message-ID: <21ECC6E090DCD21180D20000F809A18B05A2916C@exctay-02.tay.dec.com>
From: "McDonald, Marll" <Marll.McDonald@compaq.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "'gah@koyote.com'" <gah@koyote.com>
Subject: RE: Vibrator Help
Date: Tue, 13 Jun 2000 10:39:46 -0400
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

> I am looking at a 1936 Buick Ranger radio to see if it is repairable and
it
> seems the worst problem at this time is the vibrator. Are there any lists
> or newsgroups or other areas I could access for information on old car
> radio parts?

Try the newsgroup rec.antiques.radio+phono . Also, "Hemmings Motor News" has hundreds of pages of antique auto advertisements every month. They're online at <http://www.hemmings.com> .

You might spend an hour (at most) prying the metal can off the vibrator, polishing the points, putting the can back on, and turning on the radio. Be careful if you do this. The capacitors might not like the sudden arrival of high voltage after decades of no voltage. Another option is to get a solid-state vibrator replacement.

> 73 George KC5WBV

Marll KB1AGM

Message-ID: <015501bfd549\$2e0b88e0\$378abd18@Feher>
From: "Mike B. Feher" <n4fs@monmouth.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <gah@koyote.com>
Subject: Re: Vibrator Help
Date: Tue, 13 Jun 2000 11:08:04 -0400
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I just faced a very similar problem. I cut the vibrator case off about 1/2 inch from the base using a very fine saw and making sure I did not go deep. I have a small metal lathe for which I made a rotary saw accessory and it worked great. My vibrator started up after I used a burnishing tool and a little mechanical nudging. After I put it together and used copper tape, with adhesive to electrically maintain the shielding integrity of the can, which minimizes the hash in the receiver, as it is good to have it at ground potential for that and that is what those little fingers are for around the socket. For additional rigidity I also placed a layer of duct tape around the can making sure not to go too low with them so the little fingers could not do their job. It still work fine. I have also seen solutions where a higher potential like 115 VAC through a current limiting light bulb was applied to clean the contacts. I have found that method to work on occasion as well, but not always. 73 - Mike

Mike B. Feher, N4FS
89 Arnold Blvd.
Howell NJ, 07731
(732) 901-9193

Date: Tue, 13 Jun 2000 08:49:06 -0700
From: Arden Allen <gumbear@pacbell.net>
Subject: WTB: Sencore FE-20 meter.....
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0FW300MM6NWVS2@mta5.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

Folks;

I have a boatanchor loving friend who has a Sencore FE-20 field effect transistor multimeter that has an open meter coil. He's looking for a replacement meter or a meter that he can use the works from. Any help out there?

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

End of BOATANCHORS Digest 2923
